

# CLAIMS

1 – An implant, for the treatment of cystocele, having a thin and supple structure, characterised in that it comprises a support body (2) from which extend at least:

- 5 • two anterior suspension straps (3) on both sides of a sagittal plane (S),
- two posterior suspension straps (4) on both sides of a sagittal plane (S),
- and two middle suspension straps (5) on both sides of a sagittal plane (S) and between the anterior and the posterior straps (3) and (4).

2 – An implant according to claim 1, characterised in that the longitudinal axes (A<sub>3</sub>) of the anterior straps (3) form an angle ( $\alpha$ ) exceeding 45°.

3 – An implant according to claim 2, characterised in that the longitudinal axes (A<sub>3</sub>) of the anterior straps (3) form an angle ( $\alpha$ ) between 100° and 180°.

4 – An implant according to claim 2, characterised in that angle ( $\alpha$ ) is between 115° and 170°.

15 5 – An implant according to any of claims 1 to 4, characterised in that the longitudinal axes (A<sub>4</sub>) of the posterior straps (4) form an angle ( $\beta$ ) that is not zero.

6 – An implant according to claim 5, characterised in that the angle ( $\beta$ ) exceeds 10°.

20 7 – An implant according to claim 6, characterised in that the angle ( $\beta$ ) is between 10° and 75°.

8 – An implant according to claim 7, characterised in that angle ( $\beta$ ) is between 100° and 180°.

25 9 – An implant according to claim 1 to 8, characterised in that the longitudinal axis (A<sub>5</sub>) of each middle suspension strap (5) forms, with the anterior part of the sagittal plane (S), an angle ( $\gamma$ ) of between 100° and 140°, preferably between 110° and 130°.

10 – An implant according to any of claims 1 to 9, characterised in that the length of the anterior straps (3) exceeds 100 mm and, preferably 120 mm.

30 11 – An implant according to any of claims 1 to 10, characterised in that the length of the posterior straps (4) exceeds 100 mm and, preferably exceeds or equals 120 mm.

12 – An implant according to any of claims 1 to 11, characterised in that the length of the middle straps (5) exceeds 100 mm and, preferably exceeds or equals 120 mm.

13 – An implant according to any of claims 1 to 11, characterised in that the whole shape of the support body (2) is substantially rectangular.

14 – An implant according to claim 13, characterised in that the length ( $L_2$ ) of the support body (2) is between 60 and 90 mm and the width is between 40 and 60 mm.

15 – An implant according to claim 13 or 14, characterised in that the anterior straps (3) substantially extend from the posterior corners of the support body (2).

16 – An implant according to any of claims 13 to 15, characterised in that the posterior straps (4) substantially extend from the posterior corners of the support body (2).

17 – A device for the introduction of an implant (1) according to any of claims 1 to 16, characterised in that it comprises an introduction member (20) that has a supple structure and whose shape is similar to that of the implant (1) and that comprises:

- a hollow body (21) defining a cavity for the reception of the body (2) of the implant (1),
- tubular branches (22) extending from the hollow body (21) each defining a cavity for the reception of a suspension strap (3, 4, 5) of the implant (1),
- means of traction (23) extending from the end of each of the branches (22) of the introduction member,
- and means for cutting (25) at least the hollow body (21) of the introduction member (20).

18 – An introduction device according to claim 17, characterised in that the means of traction (23) include a semi-rigid needle for each tubular branch (21).

19 – An introduction device according to claim 17 or 18, characterised in that the means for cutting comprise at least one aperture (24) for the passage of a cutting instrument.

20 – An introduction device according to any of claims 17 to 19, characterised in that it comprises an implant (1) according to any of claims 1 to 16 placed in the cavity of the hollow body (21) and the tubular branches (22).

21 – An introduction device according to claim 20, characterised in that the implant (1) is free inside the introduction device (10).

22 – An introduction device according to claims 17 to 21, characterised in that it also comprises an elongated perforator guide (10) or trocar, one end (12) of which is

made to be introduced in the patient's body and the other end is equipped with a handle (14).

23 – An introduction device according to claim 22, characterised in that the shape of the perforator guide (10) is curved in one plane.

5        24 – An introduction device according to claim 23, characterised in that the curved part (15) of the perforator (10) extends over an angular sector exceeding 140° and, preferably under 180°, and in a particularly preferred manner, between 150° and 170°.

10       25 – An introduction device according to claim 23 or 24, characterised in that the curved part (15) of the perforator guide (10) has a radius of curvature  $\rho$  of between 30 mm and 60 mm and, preferably, for the part of the perforator guide extending from the handle to the end made to be introduced in the patient's body, of between 40 mm and 50 mm.

15       26 – An introduction device according to claim 22, characterised in that the perforator guide (10) has a helicoid shape at the end opposite to the handle or distal end (17).

20       27 – An introduction device according to claim 26, characterised in that the distal end (17) of the perforator guide (10) has the shape of a portion of helicoid spire extending over an angle of between 180° and 350° and, preferably, between 255° and 270°.

28 – An introduction device according to claim 27, characterised in that the spire (17) of the perforator guide (10) has a radius of curvature of between 20 mm and 40 mm, with a pitch between 15 mm and 25 mm.

25       29 – An introduction device according to any of claims 22 to 28, characterised in that it also comprises a removable tubular casing (50) whose shape is complementary to that of the perforator guide (10), intended to be fit on the perforator guide (10) and remain in the patient's body after the removal of the perforator guide (10) to define a tunnel for the passage of the means of traction (23) of the introduction member (20).

30       30 – A procedure for the treatment of cystocele in women, characterised in that it in particular consists of:

- using an implant (1) according to any of claims 1 to 16
- inserting the implant (1) in the body of the patient by placing:
  - each of the anterior suspension straps (3) in an obstructed hole,

- each of the middle suspension straps (5) in a corresponding middle translevator region,

- each of the posterior suspension straps (4) in a corresponding uterosacral region,

5       ○ and the support body (2) in the anterior vaginal wall.

31 – A procedure for the treatment of cystocele in women, characterised in that it mainly consists of:

- using an implant (1) according to any of claims 1 to 16
- inserting the implant (1) in the body of the patient by placing:

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- each of the anterior suspension straps (3) in an obstructed hole,

- each of the middle suspension straps (5) in an inferoposterior region of the corresponding obstructed hole,

15       ○ each of the posterior suspension straps (4) in a corresponding uterosacral region,

- and the support body (2) in the anterior vaginal wall.

32 – Procedure for the treatment of cystocele in women according to claims 30 or 31, characterised in that it in particular consists of placing each of the posterior suspension straps through the corresponding uterosacral ligament.

20       33 - Procedure for the treatment of cystocele in women according to claims 30 or 31, characterised in that it in particular consists of placing each of the posterior suspension straps (4) through the corresponding uterosacral ligament and in the corresponding transgluteal region.

25       34 – Procedure for the treatment of cystocele in women according to claim 33, characterised in that it in particular consists of placing each of the posterior suspension straps (4) through the corresponding uterosacral ligament and through the corresponding sacrosciatic ligament.